RESPONSE

Claims 1-3, 5, 6, 8-14, and 16-34 are pending in the application. Claims 5, 6, and 9-14 are rejected under 35 U.S.C. 112, second paragraph, claims 2, 3, 6, 9, 10, 11-13, and 31-34 are objected to because of informalities, claims 1-3, 5, 6, 8-14, and 16-19 are rejected under 35 USC 103(a) as being unpatentable over Fukushima (US 6246818 B1), and further in view of Cormack (US 6587608 B2), claims 20 and 21 are rejected under 35 USC 103(a) as being unpatentable over Fukushima and Cormack as applied to claim 16 and further in view of Domash (US 5937115), claims 23-30 are allowable, and claims 31-34 would be allowable if rewritten to overcome the rejections under this Office action. Applicant has amended claims 2, 3, 5, 6, 9-14, 16, 18, 19, 23, and 31. Reconsideration and re-examination of pending claims 1-3, 5, 6, 8-14, and 16-34 is respectfully requested.

Claim Rejections based on 35 USC 112

The Examiner has rejected claims 5, 6, and 9-14 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Further, claim 10 lacks antecedent basis.

Applicant has amended claims 5, 6, and 9-14 and contends that the amended claims comply with 35 U.S.C. 112, second paragraph pointed out by the Examiner, and hence in a condition for allowance. Applicant has also amended claim 10 to correctly reflect that the "said diffracted beam" has antecedent basis.

Claim Objections

Claims 2, 3, 6, 9, 10, 11-13, and 31-34 are objected to because of the informalities. Applicant has amended claims 2, 3, 6, 9, 10, 11-13, and 31 to overcome the objections of the Examiner, and are hence in a condition of allowance.

Claim Rejections based on 35 USC 103

(1) Claims 1-3, 5, 6, 8-14, and 16-19 are rejected under 35 USC 103(a) as being unpatentable over Fukushima and further in view of Cormack as best understood by the Examiner with rejections/objections stated in this Office action and in the previous Office action.

Applicant respectfully disagrees with the Examiner and states: A prima facie showing of obviousness is established by three base criteria only:

- (a) There must be some suggestion or motivation (explicit or implicit), either in the references themselves or in the art, to modify or combine teachings;
- (b) There must be a reasonable chance of success in combining the teachings of the references; and
- (c) The prior art references must teach all of the claim limitations.

The Applicant would like to draw the Examiner's attention to point (c) above. Nowhere in both Fukushima and Cormack do the words "quasi" or "phase-conjugate optical system" appear. Since a "quasi phase-conjugate optical system" is one of the many limitations of claim 1 of the present invention and is absent from the references a prima facie case of obviousness cannot be established. Claim 16 is identical in scope with allowable claim 23 except for one difference: the limitation that the optical system

further comprises a lens and a second mirror coupled to each other is missing from claim 16. Since claim 23 has been allowed and the reasons for the indication of allowable subject matter of claim 23 are found in claim 16, Applicant feels that claim 16 should also be allowable. Since the remaining claims (2, 3, 5, 6, 8-14, and 17-19) are either dependent on independent claim 1 or 16, they would be allowable by default and hence their rejection is moot.

(2) Claims 20 and 21 are rejected under 35 USC 103(a) as being unpatentable over Fukushima and Cormack as applied to claim 16 and further in view of Domash.

Since claims 20 and 21 are dependent on a base claim (16) that has been shown above why it should be allowable, they would be allowable by default and hence their rejection is moot.

(3) Examiner has objected to claims 31-34, but would be allowable if rewritten or amended to overcome the objections set forth in this Office action.

Applicant has amended base claim 31 to overcome the objections of this Office action. Applicant contends that claim 31 and the remaining dependent claims (32-34) are thus allowable.

CONCLUSION

For at least the foregoing reasons, Applicant respectfully submits that pending claims 1-3, 5, 6, and 8-34 are patentably distinct from the prior art of record and in condition for allowance. Applicant therefore respectfully requests that pending claims 1-3, 5, 6, and 8-34 be allowed.

Respectfully submitted,

COUDERT BROTHERS LLP

Date: January 21, 2005

By:

J. D. Harriman II